

Amendments to the Claims

Please amend the claims as set forth in the listing below. This listing of the claims will replace all prior versions, and listings of claims in the application.

No Admission. The claims presented below are labeled pursuant to the requirements of the United States Patent and Trademark Office for convenience in examination. The cancellation of a claim or reference to a claim as “currently amended” is not an admission that the claim was altered for any reason related to patentability. Applicants reserve the right to pursue the subject matter of the canceled claims in this or any other appropriate patent application.

1. (Currently amended) A method for attracting a neural progenitor cell, or a progeny of a neural progenitor cell, to a site of damage or lesion in a central nervous system (CNS) tissue, the method comprising ~~parenterally administering~~ delivering to the striatum, pallidum, septum, cortex, external capsule, internal capsule, substantia nigra-ventral tegmentum, or at or adjacent to an ependymal or subependymal zone of ~~to~~ an individual having CNS damage or lesion a sufficient amount of a purified TGF- α polypeptide or a functional fragment thereof comprising CysX₇CysX₄CysX₁₀CysXCysX₈Cys, wherein said ~~administration~~ delivery is outside of the ventricles, and wherein said ~~administering~~ delivery effects migration of the neural progenitor cell or progeny thereof to the site of damage or lesion in the CNS tissue, thereby obtaining a therapeutic effect.

2. (Currently amended) The method of claim 1, further comprising ~~administering~~ delivering a sufficient amount of a purified TGF- α polypeptide or a functional fragment thereof comprising CysX₇CysX₄CysX₁₀CysXCysX₈Cys, to stimulate differentiation of the neural progenitor cell or progeny thereof.

3. (Canceled)

4. (Canceled)

5. (Currently amended) The method of claim 1, wherein the purified TGF- α polypeptide or a or a functional fragment thereof comprising CysX₇CysX₄CysX₁₀CysXCysX₈Cys, is ~~administered~~ delivered by intrastriatal infusion.

6. (Original) The method of claim 1, wherein the central nervous system (CNS) tissue is brain tissue.

7 (Original) The method of claim 6, wherein the brain tissue is adjacent to a subependymal zone.

8. (Original) The method of claim 1, wherein the central nervous system (CNS) tissue is spinal nerve root origins.

9-32. (Canceled)

33. (Previously presented) A method for attracting a neural progenitor cell, or a progeny thereof, to a site of damage or lesion in a central nervous system (CNS) tissue, the method comprising administering a sufficient amount of purified transforming growth factor alpha (TGF α) polypeptide, or functional fragment thereof comprising CysX₇CysX₄CysX₁₀CysXCysX₈Cys, to attract the neural progenitor cell or its progeny to the site, wherein said administration is outside of the ventricles in the striatum, pallidum, septum, cortex, external capsule, internal capsule, substantia nigra-ventral tegmentum, or at or adjacent to an ependymal or subependymal zone of at or adjacent to an ependymal or subependymal zone.

34-62. (Canceled)

63. (Previously presented) A method for attracting a neural progenitor cell, or a progeny thereof, to a site of damage or lesion in a central nervous system (CNS) tissue, the method comprising intrastratially administering a sufficient amount of purified transforming growth factor alpha (TGF α) polypeptide, or functional fragment thereof comprising CysX₇CysX₄CysX₁₀CysXCysX₈Cys, to attract the neural progenitor cell or its progeny to the site.

64. (Currently Amended) The method of claim 1, 33, 63, 65 or 66 wherein said administration is by continuous infusion.

65. (New) A method for attracting a neural progenitor cell, or a progeny of a neural progenitor cell, to a site of damage or lesion in a central nervous system (CNS) tissue, the method comprising delivering to the striatum, pallidum, septum, cortex, external capsule, internal capsule, substantia nigra-ventral tegmentum, or at or adjacent to an ependymal or subependymal zone of an individual having CNS damage or lesion a sufficient amount of a purified TGF- α polypeptide or a functional fragment thereof comprising CysX₇CysX₄CysX₁₀CysXCysX₈Cys, wherein said delivery is outside of the ventricles, and wherein said delivery effects migration of the neural progenitor cell or progeny thereof to the site of damage or lesion in the CNS tissue, wherein the delivering of TGF- α polypeptide or a functional fragment thereof comprising CysX₇CysX₄CysX₁₀CysXCysX₈Cys is for a period of at least about sixteen days, thereby obtaining a therapeutic effect.

66. (New) A method for attracting a neural progenitor cell, or a progeny of a neural progenitor cell, to a site of damage or lesion in a central nervous system (CNS) tissue, the method comprising delivering to the striatum, pallidum, septum, cortex, external capsule, internal capsule, substantia nigra-ventral tegmentum, or at or adjacent to an ependymal or subependymal zone of an individual having CNS damage or lesion a sufficient amount of a purified TGF- α polypeptide or a functional fragment thereof comprising CysX₇CysX₄CysX₁₀CysXCysX₈Cys, wherein said delivery is outside of the ventricles, and wherein said delivery effects migration of the neural progenitor cell or progeny thereof to the site of damage or lesion in the CNS tissue, wherein the delivering of TGF- α polypeptide or a functional fragment thereof comprising CysX₇CysX₄CysX₁₀CysXCysX₈Cys is initiated weeks after the occurrence of the injury, thereby obtaining a therapeutic effect.

67. (New) The method of any of claims 1, 33, 63, 65, 66, or 70 wherein the CNS damage or CNS lesion results from ischemia.
68. (New) The method of any of claims 1, 33, 63, 65, 66, or 70 wherein the progenitor cell or progeny thereof is from the ependymal zone.
69. (New) The method of any of claims 1, 63, 65, 66 or 70 wherein TGF- α is delivered.
70. (New) A method for attracting a neural progenitor cell, or a progeny of a neural progenitor cell, to a site of damage or lesion in a central nervous system (CNS) tissue, the method comprising delivering to the forebrain or midbrain of an individual having CNS damage or lesion a sufficient amount of a purified TGF- α polypeptide or a functional fragment thereof comprising CysX₇CysX₄CysX₁₀CysXCysX₈Cys, wherein said delivery is outside of the ventricles, and wherein said delivery effects migration of the neural progenitor cell or progeny thereof to the site of damage or lesion in the CNS tissue, thereby obtaining a therapeutic effect.